

Application No. 10/758,488
Amdt. dated August 14, 2006
Reply to Office action of March 16, 2006

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Amendments to the Specification:

Please replace paragraph [0025] with the following amended paragraph:

[0025] For a more complete understanding of the features and advantages of the present invention, reference is now made to the detailed description of the invention along with the accompanying figures in which:

Figure 1 is a gel that shows the titration of RNA aptamers and a VEE Capsid protein;

Figures 2A, 2B and 2C are stem-loop structures for three aptamers including a variant of the 16_1 aptamer, the 7-7 aptamer and a third related aptamer, corresponding to SEQ ID NO.: 15, SEQ ID NO.: 16 and SEQ ID NO.: 17 respectively;

Figure 3 is a gel of the titration of the RNA aptamer 16_1 with the VEE Capsid Protein;

Figure 4 is a graph that demonstrates the specificity of the 16_1 RNA aptamer;

Figure 5 summarizes the selection modification cycle used to prepare RNA thioaptamers that combine sequence specificity and thio-modification to the aptamers;

Figure 6A, 6B, 6C and 6D are stem-loop structures for three engineered RNA aptamers derived from 16_1 corresponding to SEQ ID NO.: 18, SEQ ID NO.: 19, SEQ ID NO.: 20 and SEQ ID NO.: 21 respectively;

Figure 7 is a graph that shows the effect of thio-modification of the aptamer on siRNA gene silencing in HeLa cells;

Figure 8 is a graph that shows the effect of thio-modification of the aptamer on siRNA gene silencing in HeLa cells;

Figure 9 is a graph that shows the effect of thioaptamers on siRNA gene silencing in HeLa cells;

Figure 10 is another graph that shows the effect of thioaptamers on siRNA gene silencing in HeLa cells; and

Figure 11 is a graph that shows the silencing by thioaptamers in HeLa cells.

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Please replace paragraph [0071] with the following amended paragraph:

[0071] Three further variants of aptamer 16_1 were developed and the stem-loop structures determined shown in Figures 6A, 6B, 6C and 6D:

Figure 6A includes the sequence:

5'-GGGAGCUCAGAAUAAACGCUCAAGGCCCUUGCGCCACACGCAAACACCGCCC
UUCGACAUGAGGCCCGGAUCCGGCUU-3' (SEQ ID NO.: 18).

Figure 6B includes the sequence:

5'-GGGAGCUCAGAAUAAACGCUCAACUGCCUACGCCAUGCCCAGAACCCUCACGG
UUCGACAUGAGGCCCGGAUCCGGCUC-3' (SEQ ID NO.: 19).

Figure 6C includes the sequence:

5'-GGGAGCUCAGAAUAAACGCUCAACUGCCUACGCCAUGCCCAGAACCCUCACGC
UUCGACAUGAGGCCCGGAUCCGGCUU-3' (SEQ ID NO.: 20).

Figure 6D includes the sequence:

5'-GGGAGCUCAGAAUAAACGCUCAAUGCCCAUCCUGC
UUCGACAUGAGGCCCGGAUCCGGCUU-3' (SEQ ID NO.: 21).